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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,814	02/18/2000	Masahiro Ichimi	122.1392	8304

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STAAS & HALSEY LLP
700 11TH STREET, NW
SUITE 500
WASHINGTON, DC 20001

EXAMINER

WILSON, YOLANDA L

ART UNIT PAPER NUMBER

2184

DATE MAILED: 11/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/506,814

Applicant(s)

ICHIMI, MASAHIRO

Examiner

Yolanda Wilson

Art Unit

2184

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al. (USPN 6,047,222). As appears in claim 1, Burns et al. discloses a plurality of layer control devices, each implementing part of protocol layer functions and together supporting a communication protocol in column 18, lines 50-54; column 19, lines 8-14; column 5, lines 35--42, "Referring now to FIG. 12 a schematic block diagram illustrates a control system network 100 that implements field device redundancy...Redundancy may be selectively implemented at the field device level by a primary field device (labeled as 130) and a redundant field device (labeled as 132) which are connected to a first bridge (labeled 134) by a redundant connection 136 to a local bus 138 and which are connected to a second bridge (labeled as 140 by a

redundant connection 142 to the local bus 122... The Fieldbus protocol provides, in effect, a local area network for field instruments (field devices) within a process, which enables these field devices to perform control functions at locations distributed throughout a process facility and to communicate with one another before and after the performance of these control functions to implement an overall control strategy.”

Burns et al. discloses a transmission line for interconnecting said plurality of layer control devices to enable data communication between said layer control devices in column 19, lines 8-14, “Redundancy may be selectively implemented at the field device level by a primary field device (labeled as 130) and a redundant field device (labeled as 132) which are connected to a first bridge (labeled 134) by a redundant connection 136 to a local bus 138 and which are connected to a second bridge (labeled as 140 by a redundant connection 142 to the local bus 122.”

3. As appears in claim 2, Burns et al. discloses a plurality of physical layer control devices are provided each implementing a different physical layer, and one of said physical layer control devices is dynamically selected when performing communication in column 7, lines 1-8, “Each of the devices 12-32 is capable of communicating over the bus 34 and, importantly, is capable of independently performing one or more process control functions using data acquired by the device, from the process, or from a different device via communication signals on the bus 34. Fieldbus devices are, therefore, capable of directly implementing portions of an overall control strategy which, in the past, were performed by a centralized digital controller of a DCS.”

4. As appears in claim 3, Burns et al. discloses wherein a physical layer control device for implementing the function of a physical layer is provided which is duplicated by another physical layer control device, and in the event of a failure of one physical layer control device, the other physical layer control device is switch in for operation in column 3, lines 38-43, "In the event of a failure, e.g., when the controller or control logic detects a failed functional element (either a bus or a device) or the loop controller detects a cessation of communications from an element, the loop controller automatically reconfigures the redundant pair of communication status."

5. As appears in claim 4, Burns et al. discloses wherein a program necessary for the operation of each of said layer control devices is downloaded to said each layer control device in column 5, lines 60-65, "Typically, a configurer is located in one of the devices, such as the host 12, and is responsible for setting up or configuring each of the devices (which are "smart" devices in that they each include a microprocessor capable of performing communication and, some cases, control functions)..."

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al. (USPN 6,047,222). Burns et al. fails to explicitly state said transmission line is a serial bus. Official Notice is taken that both the concept and the advantages of having

said transmission line being a serial bus is well known in the art. It would have been obvious to have said transmission line being a serial bus because a serial bus is an interface over which data can be transferred.


8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al. (USPN 6,047,222). Burns et al. fails to explicitly state wherein said serial bus is compliant with the USB standard. Official Notice is taken that both the concept and the advantages of having said serial bus being compliant with the USB standard is well known in the art. It would have been obvious to have said serial bus being compliant with the USB standard because the USB standard brings plug-and-play features for the adding of peripheral devices and to have this standard implemented over a serial bus.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burns et al. (USPN 6,047,222). Burns et al. fails to explicitly state wherein said serial bus is compliant with the IEEE 1394 standard. Official Notice is taken that both the concept and the advantages of having said serial bus being compliant with the IEEE 1394 standard is well known in the art. It would have been obvious to have said serial bus being compliant with the IEEE 1394 standard because the IEEE 1394 standard is a standard used for transmitting digital data over a serial bus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yolanda Wilson whose telephone number is (703) 305-3298. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


ROBERT BEAUSOLIEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100